Release A CDR RID Report

Date Last Modified 10/9/95 Originator Chris Lynnes

(301) 286-2260 Phone No

SDPS/CSMS Review Driginator Ref GD-CDR-CL-16

CDR 26

Priority 2

RID ID

Organization **GSFC DAAC**

E Mail Address lynnes@daac.gsfc.nasa.gov

Document Design Specification

> Section Page Figure Table

Category Name ECS System-Level

Actionee **ECS**

Sub Category

Subject Object reuse within SDPS

Description of Problem or Suggestion:

Several object classes within SDPS seem ripe for reuse within other CSCIs, either as is, or split into generalized/specialized classes. Examples are the DbAccess in DataServer, Sessions, and PVL parsing.

Originator's Recommendation

Identify a process for identifying such candidates for reuse and coordinating reuse among CSCIs.

GSFC Response by: **GSFC** Response Date

HAIS Response by: Jacob Eisenstein HAIS Schedule 9/6/95

HAIS R. E. 9/29/95 Jacob **HAIS Response Date**

Release A has a System Engineering group (SE) which is reviewing the design for opportunities of code reuse, including re-use through generalization. A number of such opportunities have been identified (e.g., UR, error and event handling, subscriptions, sessions & requests, GUI object classes). Work on such opportunities proceeds according to priority, which is influenced by plan (when is the common software needed) and benefit (cost vs. expected saving).

If work is approved by the Release A manager, a small team of engineers is created which includes representation from SE and the affected subsystems, to determine whether a common implementation approach is indeed feasible, and what it should be. Several such teams are currently in process (e.g., UR, error handling, subscriptions, sessions and requests).

The teams report to a system architecture team consisting of the Release A, Release B, and SCDO system architects. In case of a positive decision, responsibility for development of the shared Release A software is allocated by the Release A manager, and the decision is communicated to the implementation teams. The resulting common software specifications are published for re-use. Walkthroughs would inspect whether common software classes were indeed reused.

In reference to the specific examples cited in the RID, we note that there is already reuse of PVL parsing and other software components between various DSS and INS components (as evidenced in the design in DID 305).

Status Closed Date Closed 10/9/95 Sponsor Schroeder

Attachment if any

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